import RPi.GPIO as GPIO

import sys

from PyQt5.QtWidgets import \*

from PyQt5 import uic

form\_class = uic.loadUiType("./test01.ui")[0]

LED\_RED = 19

LED\_BLUE = 13

LED\_GREEN = 6

class WindowClass(QMainWindow, form\_class) :

   def \_\_init\_\_(self) :

      super().\_\_init\_\_()

      self.setupUi(self)

      self.Btn\_ON.clicked.connect(self.btnOnFunction)

      self.Btn\_OFF.clicked.connect(self.btnOffFunction)

      self.Btn\_RED.clicked.connect(self.btnRedFunction)

      self.Btn\_BLUE.clicked.connect(self.btnBlueFunction)

      self.Btn\_GREEN.clicked.connect(self.btnGreenFunction)

      self.Btn\_WHITE.clicked.connect(self.btnWhiteFunction)

      GPIO.setmode(GPIO.BCM)

      GPIO.setup(LED\_RED, GPIO.OUT)

      GPIO.setup(LED\_BLUE, GPIO.OUT)

      GPIO.setup(LED\_GREEN, GPIO.OUT)

   def btnOnFunction(self) :

      print("LED가 활성화 되었습니다")

   def btnOffFunction(self) :

      GPIO.output(LED\_RED, True)

      GPIO.output(LED\_BLUE, True)

      GPIO.output(LED\_GREEN, True)

      GPIO.cleanup()

      print("LED가 종료되었습니다")

   def btnRedFunction(self) :

      GPIO.output(LED\_RED, False)

      GPIO.output(LED\_BLUE, True)

      GPIO.output(LED\_GREEN, True)

      print("빨간불이 켜졌습니다")

   def btnBlueFunction(self) :

      GPIO.output(LED\_RED, True)

      GPIO.output(LED\_BLUE, False)

      GPIO.output(LED\_GREEN, True)

      print("파란불이 켜졌습니다")

   def btnGreenFunction(self) :

      GPIO.output(LED\_RED, True)

      GPIO.output(LED\_BLUE, True)

      GPIO.output(LED\_GREEN, False)

      print("초록불이 켜졌습니다")

   def btnWhiteFunction(self) :

      GPIO.output(LED\_RED, False)

      GPIO.output(LED\_BLUE, False)

      GPIO.output(LED\_GREEN, False)

      print("흰색불이 켜졌습니다")

if \_\_name\_\_ == "\_\_main\_\_" :

   app = QApplication(sys.argv)

   myWindow = WindowClass()

   myWindow.show()

   app.exec\_()